# HEALTH SYSTEM DIALOGUES ON DOXYCYCLINE USE TO PREVENT BACTERIAL SEXUALLY TRANSMITTED INFECTIONS IN CANADA AND GLOBALLY: INFORMING GUIDELINE DEVELOPMENT, GLOBAL CONSENSUS, AND ANTIMICROBIAL STEWARDSHIP

### Authors:

<u>Vo, TD</u><sup>1</sup>, Kong, FYS<sup>2</sup>, Ludwick, T<sup>2</sup>, Cardwell, ET<sup>2</sup>, Hocking, JS<sup>2</sup>, Jollimore, J<sup>3</sup>, Purdie, A<sup>4</sup>, Nambiar, D<sup>5</sup>, Dumont-Blais, A<sup>6</sup>, Kwag, M<sup>7</sup>, Monteith, K<sup>8</sup>, Hart, T<sup>9</sup>, Cox, J<sup>10</sup>, Lachowsky, N<sup>11</sup>, Lambert, G<sup>12</sup>, Moore, D<sup>13</sup>, Tan, DHS<sup>1,14</sup>, Grennan, T<sup>13,15</sup>, Grace, D<sup>1</sup>

<sup>1</sup>University of Toronto, <sup>2</sup>University of Melbourne, <sup>3</sup>CATIE, <sup>4</sup>Health Initiative for Men, <sup>5</sup>Gay Men's Sexual Health Alliance, <sup>6</sup>RÉZO, <sup>7</sup>Community Based Research Centre, <sup>8</sup>Coalition des Organismes Communautaires Québécois de Lutte Contre le SIDA, <sup>9</sup>Toronto Metropolitan University, <sup>10</sup>McGill University, <sup>11</sup>University of Victoria, <sup>12</sup>Centre intégré universitaire de santé et de services sociaux du Centre-Sud-de-l'Ile-de-Montréal, <sup>13</sup>University of British Columbia, <sup>14</sup>Division of Infectious Diseases, St. Michael's Hospital, <sup>15</sup>HIV/STI Program, BC Centre for Disease Control

# Background:

Bacterial sexually transmitted infections (STIs) continue to rise in Canada and globally, especially among gay, bisexual, and queer men who have sex with men (GBM) and gender diverse people. Doxycycline has been explored as pre- or post-exposure prophylaxis (DoxyPrEP/PEP) for bacterial STIs (e.g., syphilis). Yet, concerns remain regarding the impact on antimicrobial resistance (AMR), especially for gonorrhea and non-STI pathogens. This presentation explores the evolving state of knowledge and conversation on DoxyPrEP/PEP in Canada and Australia.

#### Methods:

We conducted a critical ethnography involving policy reviews, reflections from DoxyPrEP/PEP learning events, and virtual one-on-one interviews with health system stakeholders (e.g., clinicians, STI/AMR researchers, representatives from community-based health organizations, and public health officials) across Canada and Australia (*n*=22 to date). We conducted a reflexive thematic analysis of these data.

#### Results:

Some clinicians, researchers, and public health officials emphasized caution and an evidence-informed approach when recommending DoxyPrEP/PEP, while raising concerns for AMR and the need for antimicrobial stewardship to ensure tools are available to combat antibiotic-resistant bacteria. Meanwhile, some clinicians and community-based health organizations, particularly those working with GBM and gender diverse people, have recommended DoxyPEP to clients, urging use of the best available evidence to combat epidemic-level bacterial STIs. They refer to the importance of harm reduction and person-centred sexual healthcare. Almost all stakeholders identified equity-related concerns with implementation of the intervention, including cost of doxycycline, health literacy, culturally-responsive health promotion,

lack of access to inclusive sexual healthcare, and systems of oppression within the health system (e.g., heterosexism, cisgenderism, racism, classism, ableism).

# Conclusion:

While the discourse and perspectives appear divergent, there is a clear need for effective strategies to engage GBM and gender diverse communities in STI prevention and sexual healthcare. The findings will inform engagements to develop DoxyPEP guidelines in Canada and create global consensus on using DoxyPEP.

# **Disclosure of Interest Statement:**

The study was funded in part by the Manchester-Melbourne-Toronto Research Partnership Development Fund 202 provided by the Universities of Manchester, Melbourne, and Toronto, and funding from the Canadian Institutes for Health Research. No pharmaceutical grants were received in the development and implementation of this study.